# Executive summary

Public health agencies are a lot like fire departments. They teach and practice prevention at the same time they maintain readiness to take on emergencies. They are most appreciated when they respond to emergencies. They are most successful—and least noticed—when their prevention measures work the best.

In another respect, the two are different. We all know what a fire department does; few of us know what a public health department does. The very existence of health departments is testament to the fact that, when legislators, county commissioners, and other policy makers understand what those departments do, they support them. It is a rare person who, once familiar with the day-to-day activities of a public health department, would want to live in a community without a good one.

What constitutes a good public health department? What must it be able to do? How much capacity is required? How do we measure it? The Public Health Improvement Plan (PHIP) answers these questions.

## The real causes of health problems

Most preventable health problems—including about half of all deaths—are caused by tobacco use, improper diet, lack of physical activity, alcohol misuse, microbial and toxic agents, firearm use, unsafe sexual behavior, motor vehicle crashes, and illicit use of drugs. These causes are chiefly a result of human behavior. While universal access to personal medical care is a critical goal of health system reform, personal behavior change has greater potential to address the fundamental causes of health problems.

Since 1900, the average life expectancy of Americans has gone from 45 to 75 years—a 30 year increase. Public health, through such measures as sanitation, immunization, and education, is responsible for about 25 of those years.

## The heart of public health: Population-based prevention

The goal of public health is prevention of disease, injury, disability, and premature death. Prevention includes: 1) Primary prevention (the focus of public health), which reduces susceptibility or exposure to health threats. Immunizations and health education are examples. 2) Secondary prevention, which most often detects and treats disease in early stages. A mammography program to detect breast cancer is an example. 3) Tertiary prevention, which alleviates some of the effects of disease, injury, and disability through such means as surgery, physical therapy, and medication.

Public health is not simply medical care funded or provided through public means. The services of public health are less visible and more difficult to understand than medical services. Public health prevention protects entire communities or populations from such threats as communicable diseases, epidemics, and environmental contaminants. It does so through a highly collaborative approach which most often affects us as members of the general public rather than as patients.

The most common and effective public health activities are in the area of primary prevention, which has two main components: health promotion and health protection.

Health promotion includes health education and the fostering of healthy living conditions and life-styles. Activities are directed toward individuals, families, groups, or entire communities, helping people identify needs, get useful information and resources, and take action to achieve change.

Health protection services and programs control and reduce the exposure of the population to environmental or personal hazards, conditions, or factors that may cause health problems. Health protection includes immunization, infectious disease surveillance and outbreak investigations, water purification, sewage treatment, control of toxic wastes, inspection of restaurant food service, and numerous other activities.

## The core functions of public health

It is often difficult to determine where and when public health threats are occurring. The process of doing this is called health assessment. It includes collection, analysis, and dissemination of information on health status, personal health problems, population groups at greatest risk, availability and quality of services, resource availability, and concerns of individuals.

Assessment leads to policy development, a complex process of considering alternatives for action and deciding which to pursue. Policy development involves many individuals and organizations in decision making about the relative importance of various public health problems.

After policies are formulated, the next step is assurance—seeing that those policies are carried out. Public health agencies may carry out a policy themselves or they may monitor its implementation by other community partners.

These three functions—assessment, policy development, and assurance—are the core functions of public health outlined by the Institute of Medicine in a comprehensive 1988 national planning document, The Future of Public Health. Washington's Public Health Improvement Plan refines this framework, outlining the major responsibilities of state and local public health agencies.

Washington's plan retains the concepts of assessment and policy development, as presented in The Future of Public Health. It adds a significant piece on prevention and broadens the assurance function with a section on access and quality. The final ingredient of the Washington plan is administration, which supports public health functions through a number of essential activities regarding personnel, budgeting, accounting, contracts, facilities, and information technology.

## Public health is a bargain

Public health measures are responsible for most of the improvements in health that we have experienced in this century, but they are funded by a very small and decreasing portion of the total dollars we spend on health. The great majority of those total health dollars—both taxes and private spending—go for what is more appropriately called "illness and injury care" rather than "health care." Of the total estimated $18 billion spent in Washington State annually, less than two percent goes for public health.

We have a choice. We can wait until people become ill, injured, or disabled, and then treat them in our expensive medical care system, or we can deal with the causes of these problems and prevent many of them from ever happening. The choice we make affects how much money we must spend, and what we spend it on.

Many public health prevention programs cost less than the treatment services needed if prevention is absent. Proven cost-effective public health measures include water fluoridation to prevent tooth decay, smoking cessation among pregnant women to prevent low birth weight, immunization to prevent measles and mumps, and health education of consumers to reduce their need for medical services.

## Adequate and stable public health infrastructure

The ability to prevent public health problems or respond to emergencies cannot be created each time an epidemic breaks out, a water supply is contaminated, or a toxic chemical is spilled. Successful health promotion and protection activities require continuous, consistent effort. The public health system requires a solid, ongoing capacity to monitor, anticipate, and respond to health problems, regardless of which disease or public health threat has the public's attention at the moment.

Health problems are seldom static; they are not uniform throughout Washington, either geographically or from year to year. To successfully address them, we need the best possible information on the nature and extent of the problems. We have a certain capacity, right now, to assess these problems, but that capacity should be significantly improved.

## Capacity standards: Defining the infrastructure

This plan defines the core function capacity that Washington's local and state public health jurisdictions must have. The 88 capacity standards presented in the plan are the most definitive description we have to date of what well-functioning public health agencies must be able to do. They are a guide for public health jurisdictions as they examine and refine their role in protecting communities.

The standards are in functional groupings: community health assessment; development of public health policy; assuring community access to quality health care services; protecting the community against public health threats; promoting public health within the community; and providing the leadership, financial, and organizational administration required to integrate these functions into a coordinated, effective public health system. These standards will become the basis for contractual arrangements between state and local jurisdictions.

The goal is that the problem-specific, separately funded public health programs of today will be linked together through a series of system-wide standards that focus less on a list of specific health problems or programs and more on the basic responsibility of state and the local public health jurisdictions of assuring healthy conditions in communities.

## Improving health status

The health status of a population can be tracked, analyzed, and improved through public health measures, using as a reference point such indicators as death rates and disease incidence and prevalence rates. With the improvements in core function capacity called for in this plan, we could significantly improve our understanding of important public health problems in Washington. Stronger health assessment, backed up by improved capacity for the other core functions—especially policy development and prevention—will give us the opportunity to intelligently choose the strategies that will address the most pressing problems in the most effective manner. This will bring real improvements in health status, which is, after all, the ultimate goal.

The plan describes thirty-nine key public health problems and possible interventions in five general areas: infectious disease; non-infectious disease; violence and injury; family and individual health; and environmental health.

For each key problem, the plan establishes outcome standards, which are long-term Washington State-specific objectives, generally for the year 2000. They define optimal, measurable future levels of health status, maximum acceptable levels of disease, injury, or dysfunction, and in some cases the degree to which a particular service or program is operational.

The plan also introduces the concept of threshold standards. Threshold standards define death rates or levels of illness or injury in a community or population which, if exceeded, call for closer attention and may signal alarms for action. A threshold is also a way of measuring progress toward an established outcome standard.

## The public health-medical care partnership

There are 33 local health jurisdictions in Washington, covering the entire state. Organized on a county or multi-county basis, they are the action arms of the public health system, with responsibility for program design and delivery. Every city, town, and county must either form a local health department or district or be part of a health department with other local jurisdictions. The largest local health jurisdiction—the Seattle-King County Department of Public Health — serves over one and a half million people, over 30 percent of the state's population. The smallest—the Garfield County Health Department—serves just over 2000 people. The ten largest jurisdictions serve 80 percent of the state's population. The ten smallest serve two percent.

In the reformed health system envisioned for Washington, all state residents will be insured for a comprehensive set of benefits and will receive most of their personal and family care from practitioners through certified health plans. Local and state public health agencies will monitor health status and threats to health, helping communities set priorities and strategies for action, and assuring that strategies are carried out successfully.

To succeed at both preventing and treating health problems, the public health and medical care systems must work closely together. The Health Services Act promotes shared responsibility among the Washington Health Services Commission, the Health Care Authority, the Department of Health, the State Board of Health, and other health-related state agencies for improving the health of state residents. The commission is responsible for focusing the attention of certified health plans on improving health status, not just on providing health care services. The Health Care Authority will expand access to needed health care services through publicly sponsored health plans and programs. The department and board, in carrying out their duties to collect and analyze health data and set statewide priorities, will inform the commission of health problems that certified health plans should address.

## Clinical personal health services in public health

Overall, our current medical care system concentrates on clinical curative and therapeutic services rather than prevention. To some extent, the public health system has been influenced by that emphasis. Twelve percent of public health dollars in Washington State are now used for a variety of clinical personal health services, with the great majority of these resources spent in five areas: vaccine and immunization; sexually transmitted diseases (STDs); HIV/AIDS; family planning/reproductive health; and tuberculosis. This has sometimes impeded the capacity of public health jurisdictions to focus on primary prevention. On the other hand, a certain amount of clinical services are necessary in the public health system to provide optimal protection of the general public from infectious diseases. These activities require expertise and approaches to service delivery not commonly found in the overall health care system. Public health should continue to provide these clinical services in keeping with a fundamental responsibility to protect the public's health.

## Categorical programs

For much of the past forty years, public health has been defined by a series of categorical programs and problems such as AIDS, tuberculosis, sewage treatment, immunizations, foodborne illnesses, and primary care for the underserved. When a problem was identified and brought into public view, legislators enacted laws and appropriated funds to address that specific problem. Public health agencies responded by organizing themselves to carry out disease-specific or problem-specific programs.

Some categorical programs have been quite important and successful, such as the state's Omnibus AIDS Act and statewide sexually transmitted disease prevention efforts. However, the reliance on such single-focus programs to finance public health has left these agencies with insufficient resources to continuously monitor health-related factors affecting the entire community and maintain the capability to deal with health threats not included in categorical programs.

## The need for additional capacity

In May 1994 Washington State used a nationally-designed Centers for Disease Control survey to develop general information on our performance of the three core functions defined by the National Institute of Medicine (assessment, policy development, and assurance). The results show significant deficits in both the presence of these core functions in communities and in the adequacy of the functions where they are present.

The project also gathered information about performance of the categories of core functions as outlined in the PHIP capacity standards (assessment, policy development, access and quality, protection, promotion, and administration). It was determined that most of the capacity standards are being addressed in some way, but that statewide, when both local and state agencies are combined, only 9% of capacity standards are being fully met.

While these estimates of needed capacity are general in nature, they do show there are deficits in our ability to fully meet the core function capacity standards, at both the state and local levels. A more detailed description of these analyses, Methodology for Assessment of Performance and Resource Requirements, is available upon request from the Department of Health.

## Resources to meet the capacity standards

To estimate resources needed to meet the capacity standards, the PHIP focused on staffing because the great majority of the operating costs of public health agencies are personnel costs and there are existing formulas for determining indirect operating costs for staffed positions. The use of work force to estimate an annual public health resource gap is not intended as the suggested approach for the use of all new funds. For example, some capacity standards might be met through restructuring of the system, expanded use of technology, reallocation of resources, and extending public health partnerships with the private and voluntary sectors.

The conclusion was that the public health system statewide (both the Department of Health and all the local public health jurisdictions) needs about $104 million per year, in addition to the $330 million now spent on public health, to fully meet all the capacity standards.

This is the estimated deficit between where the official public health system is in 1994 and the vision of where the system should be in 2001. It is similar to the findings of a 1993 survey that estimated the costs of addressing urgent unmet public health needs in Washington at $112 million a year.

This estimate is only a reference point; it will be refined and adjusted as cost saving models for public/private partnerships are tested and implemented, as public health work force skills and performance are enhanced, as communication and information technologies are applied, as the public health system is restructured, and as health system reform in the State of Washington evolves.

It is not recommended that the entire resource deficit be made up during the upcoming 1995-1997 biennium. The plan will bring major changes in the public health system. To make those changes effectively, and to allow for adjustments as the complexities of broader health system reform unfold, implementation should be phased in over a six-year period, from July 1995 through June 2001. The new funds should begin with $17.5 million in the first year (1995) and increase annually by that amount over the next five years ($17.5 million, $35 million, $52.5 million, $70 million, $87.5 million, and $104 million) until the annual increase is $104 million in 2001.

## Public health finance and governance

There are three crucial finance and governance issues in Washington's public health system that are addressed in the plan.

First, varied organizational and governance structures of local public health jurisdictions often make it difficult for them to work together. Second, unclear relationships exist in some areas between local jurisdictions, Indian tribes, and the state. Third, state and local resources are inadequate, caused partly by a lack of dedicated, stable funding of the public health system.

To address these issues, the public health system should:

- Establish clear measures and methods for determining whether health jurisdictions are meeting the capacity standards.
- Recognize the autonomy of tribal governments and work closely with them to improve the health of American Indian people.
- Have dedicated sources of funding, including a percentage of the Health Services Account, a mechanism whereby private sector financing of health care reflects the public costs of protection and promotion of the health of the population, and other sources as identified in the future.
- Assure that additional state funds for public health will expand and complement, but not supplant, present local government support for public health.
- Establish methods of distributing funds that encourage collaboration between local health jurisdictions and consider local ability to pay, population, geography, and other relevant factors.

## Six Year Implementation of the PHIP

The Public Health Improvement Plan is an ambitious departure from business as usual. It proposes a six-year phase-in period to fully meet all 88 capacity standards in all areas of the state. During this time, there must be growing collaboration and cooperation among all parts of the public health system, with a strong and consistent focus on prevention.

This is an ongoing plan, to be submitted to the Legislature every biennium. It will be evaluated and revised on a regular basis, with attention to emerging trends, the relative success of different interventions, and the need to address real problems with the best tools at our disposal.

## Recommendations for action, 1995-97 biennium

The 1994 the PHIP proposes a number of high priority actions that will begin the implementation of the capacity standards, and finance and governance recommendations. These actions should begin now.

Collaboration

1. Local public health jurisdictions should take the lead in developing a plan for shared responsibilities with certified health plans and other community agencies.
2. The State Department of Health, in collaboration with local public health agencies, should provide technical assistance to certified health plans and other community providers to strengthen their ability to prevent disease and promote public health.
3. State and local public health agencies should help develop communication policies and networks among state and local public health jurisdictions and other community health-related agencies.

4. The State Department of Health should collaborate with the Washington Health Services Commission in a statewide education campaign about ways to protect and improve the public's health.
5. The State Department of Health should implement short-term financial incentives to strengthen coordination and collaboration among local public health jurisdictions and other community based health-related agencies.

Core function capacity building

6. New state funds for public health should emphasize improving capacity for assessment, health promotion, and access and quality, recognizing that the unique needs of specific jurisdictions may require early investments in policy development and protection.
7. The Department of Health should develop and offer technical assistance to local public health jurisdictions to help them make decisions concerning clinical personal health services.
8. The Department of Health should work closely with the local public health jurisdictions to assist them in developing the capacity for community health planning and community mobilization.
9. The Department of Health should help develop and implement a professional training and educational program to enhance the competencies of the public health work force to perform the core public health functions.
10. The Department and local jurisdictions should participate in the development of the Health Services Information System.

Financing

11. The Department of Health should explore ways of minimizing the negative effects of changes in local government public health financing, including a possible short term subsidy to local jurisdictions while it develops other sources of funding.
12. The Department of Health should provide financial incentives to local health jurisdictions to encourage collaboration among state and local health jurisdictions and other community-based public health agencies.
13. The Department of Health should develop a contract and financial tracking system to provide accountability for contract funds to local health jurisdictions and to determine cost effectiveness of public health investments.

Clinical personal health services transition

14. For the 1995-97 biennium, current public health funds supporting clinical personal health services should remain in the public health system.
15. The Department should work closely with local public health jurisdictions, the Washington Health Services Commission, and certified health plans to monitor the transition of clinical personal health services from public health to private health coverage.

### Legislation

16. The Department of Health should review state laws and regulations to identify those related to public health and make recommendations about needed changes.
17. The Department of Health shall evaluate whether or not legislation is necessary to implement the PHIP vision of a new frame work for public health in Washington based on the capacity standards.

### Conclusion

Through the implementation of the Public Health Improvement Plan, the health problems of Washington State will continue to be addressed, but in a much more efficient, comprehensive, and participatory process. The public health system will begin a shift away from its present emphasis on single issue funding and individual patient treatment toward a more expansive approach that focuses on health protection and promotion for all members of the community. Since the ultimate goal of the PHIP is to protect and improve the health of Washington citizens, ongoing evaluation of the plan will involve assessing the progress toward the recommended outcome standards. Success of the 1994 PHIP will require adequate funding, implementation of the 88 capacity standards, and collaborative efforts to achieve all recommended standards.